FORMULATION AND DELIVERY METHOD TO ENHANCE ANTIOXIDANT POTENCY OF VITAMIN E

ABSTRACT

5 A formulation to deliver a full-spectrum of Vitamin E isomers for improved antioxidant capacity, bioavailability, dissolution and efficacy. The formulation includes $dl-\alpha$ -tocopheryl acetate or $dl-\alpha$ -tocopheryl succinate (synthetic Vitamin E), natural Vitamin E and mixed tocopherols, such as α -, β -, γ - and δ -tocopherol, as well 10 as four isomers $(\alpha, \beta, \gamma \text{ and } \delta)$ of tocotrienols. This formulation is designed to deliver at least 17-times the antioxidant capacity of synthetic Vitamin E ($dl-\alpha$ -tocopheryl acetate), and at least twice the antioxidant capacity of natural Vitamin E (d- α tocopherol) as measured by oxygen radical absorbance capacity 15 (ORAC) assay. The potent antioxidant capacity of this formula affords protection against oxidative damage of cell membranes, heart disease, cancer and eye and skin disease.